

AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. APPLN. NO. 09/691,049  
ATTORNEY DOCKET NO. Q61398

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1. (*Currently Amended*) A shaping method for use by a shaper (S) in a communication network to convert an incoming data flow (IN)-with an incoming data packet rate (R-IN) into an outgoing data flow (OUT)-with an adaptive outgoing data packet rate (R-OUT), said shaping method comprising: including the steps of

buffering, with a buffer (BUF) of said shaper (S), data packets of said incoming data flow (IN)-and generating thereby buffered data packets; and

determining by a first determiner (DET1) of said shaper (S) a leaking time moment (P-rel) for a buffered data packet (P) of said buffered data packets, said leaking time moment (P-rel) being a time moment at which said buffered data packet (P) must be leaked by said buffer (BUF) and that determines thereby said adaptive outgoing data packet rate (R-OUT), said step of determining said leaking time moment (P-rel) being realized as a function of traffic contract parameters (PCR; MCR) related to said incoming data flow (IN), characterized in that said method further comprises the steps of:

receiving status information (STAT) of a marker (M) which is downstream coupled to said shaper (S);

determining a conform time moment (P-conf) according to said status information (STAT) and according to a predefined drop priority, said conform time moment (P-conf) being a

AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. APPLN. NO. 09/691,049  
ATTORNEY DOCKET NO. Q61398

time moment at which, in the event of leaking said data packet ( $P$ ) by said buffer at said conform time moment ( $P_{-conf}$ ), said buffered data packet ( $P$ ) receives from said marker, upon reception, said predefined drop priority; and

comparing said conform time moment ( $P_{-conf}$ ) with said leaking time moment ( $P_{-rel}$ ); and in the event when said conform time moment ( $P_{-conf}$ ) is earlier than said leaking time moment ( $P_{-rel}$ ), giving said leaking time moment ( $P_{-rel}$ ) the value of said conform time moment ( $P_{-conf}$ ) in order to leak said buffered data packet ( $P$ ) at that time moment.

2. (*Currently Amended*) The shaping method according to claim 1, wherein characterized by determining said conform time moment ( $P_{-conf}$ ) according to a drop priority assigned to said buffered data packet ( $P$ ).

3. (*Currently Amended*) The shaping method according to claim 1, wherein characterized in that in the event that said conform time moment ( $P_{-conf}$ ) is later than said leaking time moment ( $P_{-rel}$ ), retaining by said comparing means ( $COMP$ ) the value of said leaking time moment ( $P_{-rel}$ ) in order to leak said buffered data packet ( $P$ ) at that time moment.

4. (*Currently Amended*) The shaping method according to claim 1, wherein characterized in that in the event that said conform time moment ( $P_{-conf}$ ) is later than said leaking time moment ( $P_{-rel}$ ), leaking said buffered data packet ( $P$ ) substantially immediately.

AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. APPLN. NO. 09/691,049  
ATTORNEY DOCKET NO. Q61398

5. (*Currently Amended*) The shaping method according to claim 1, wherein characterized in that in the event that said conform time moment ( $P_{-conf}$ ) is later than said leaking time moment ( $P_{-rel}$ ), said comparing means ( $COMP$ ) gives said leaking time moment ( $P_{-rel}$ ) the value of a second conform time moment ( $P_{-conf}$ ) in order to leak said buffered data packet ( $P$ ) at that second time moment, said second conform time moment ( $P_{-conf}$ ) being determined according to said status information ( $STAT$ ) and according to a second drop priority and being earlier than said leaking time moment ( $P_{-rel}$ ).

6. (*Currently Amended*) A shaper ( $S$ ) for use in a communication network to convert an incoming data flow ( $IN$ ) with an incoming data packet rate ( $R_{-IN}$ ) into an outgoing data flow ( $OUT$ ) with an adaptive outgoing data packet rate ( $R_{-OUT}$ ), said shaper ( $S$ ) comprising:  
a buffer ( $BUF$ ) to buffer data packets of said incoming data flow ( $IN$ ) and to generate thereby buffered data packets; and  
a first determiner ( $DET1$ ) to determine a leaking time moment ( $P_{-rel}$ ) for one of said buffered data packets at which said buffered data packet ( $P$ ) must be leaked by said buffer ( $BUF$ ) and to determine therewith said adaptive outgoing data packet rate ( $R_{-OUT}$ ), said first determiner ( $DET1$ ) being enabled to determine said leaking time moment ( $P_{-rel}$ ) as a function of traffic contract parameters ( $PCR$ ;  $MCR$ ) being related to said incoming data flow ( $IN$ ),  
characterized in that said shaper ( $S$ ) further comprises:

a second determiner ( $DET2$ ) receiving status information ( $STAT$ ) of a marker ( $M$ ) which is downstream coupled to said shaper ( $S$ ) and determining a conform time moment ( $P_{-conf}$ )

AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. APPLN. NO. 09/691,049  
ATTORNEY DOCKET NO. Q61398

according to said status information (~~STAT~~) for said buffered data packet (~~P~~), said conform time moment (~~P-conf~~) being a time moment at which, in the event of leaking said buffered data packet (~~P~~) by said buffer at said conform time moment (~~P-conf~~), said buffered data packet (~~P~~) receives upon reception from said marker (~~M~~) a predefined drop priority; and

a comparer (~~COMP~~) coupled between said first determiner (~~DET1~~), said second determiner (~~DET2~~) and said buffer (~~BUF~~) and comparing said conform time moment (~~P-conf~~) with said leaking time moment (~~P-rel~~) and, in the event that said conform time moment (~~P1-conf~~) is earlier than said leaking time moment (~~P-rel~~), giving said leaking time moment the value of said conform time moment (~~P-conf~~) in order to leak said buffered data packet (~~P~~) at that time moment.

7. (*Currently Amended*) A marker (~~M~~) for use in a communication network upstream coupled to a shaper (~~S~~), wherein characterized in that said shaper (~~S~~) is a shaper according to claim 6 and that said marker (~~M~~) comprises a retriever (~~RET~~) retrieving from said marker (~~M~~) status information (~~STAT~~) and transmitting said status information (~~STAT~~) to said shaper (~~S~~).

8. (*Currently Amended*) A telecommunication network, comprising at least a shaper (~~S~~) according to claim 6.

9. (*Currently Amended*) A telecommunication network, comprising at least a marker (~~M~~) according to claim 7.